## **Division of Materials and Tests**

# TDOT Certification: Hot Mix Asphalt Certification Program

## Course Title: Asphalt Concrete Plant Technician Course

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## **Course Description**

A Certified Plant Technician should demonstrate a working knowledge of operations at a hot mix asphalt plant and the submittal of pertinent reports including an understanding of AASHTO / ASTM Test Methods and TDOT Specifications.

#### **Scope of Course**

The course covers plant setup, applicable forms, appropriate calculations, and the following AASHTO and ASTM Test Methods:

- AASHTO T 2 Standard Practice of Sampling Aggregates
- AASHTO T 11 Materials Finer Than No. 200 Sieve in Mineral Aggregates by Washing
- AASHTO T 27 Sieve Analysis of Fine and Coarse Aggregates
- AASHTO T 30 Mechanical Analysis of Extracted Aggregates
- AASHTO T 84 Specific Gravity and Absorption of Fine Aggregate
- AASHTO T 85 Specific Gravity and Absorption of Coarse Aggregate
- AASHTO T 164 Quantitative Extraction of Bitumen form Bituminous Paving Mixtures
- AASHTO T 166 Bulk Specific Gravity of Compacted Bituminous Mixtures Using Saturated Surface-Dry Specimens
- AASHTO T 168 Sampling Bituminous Paving Mixtures
- AASHTO T 209 Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
- AASHTO T 248 Reducing Samples of Aggregate to Testing Size
- AASHTO T 255 Total Moisture Content of Aggregate by Drying
- AASHTO T 308 Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) by the Ignition Method
- \* TDOT Test Method for Stripping (Ten Minute Boil Test)
- TDOT Test Method for Coating
- TDOT Test method for Glassy Particles in Slag
- TDOT Test Method for Fractured Face Count for Marshall Mixes
- TDOT Test Method for Loss on Ignition for Surface Mixes

#### **Prerequisites**

For TDOT employees, one year of service with TDOT and completion of Math 1, (skills through basic algebra) Supervisor's approval and written recommendation

A general knowledge of asphalt plant operations

Familiarity with applicable TDOT Standard Specifications, Supplemental Specifications, and Special Provisions

#### **Certification Requirements**

TDOT will grant a 5 year certification only to those applicants who meet the following requirements:

- Attendance of the 5-day course in its entirety
- Successful completion of a 6 hour examination with a passing score of 70% or above. (The exam is OPEN BOOK and consists of true/false, multiple choice and word problems)
- Demonstration of his/her abilities to Regional Materials and Tests Personnel

## **Recertification Requirements**

- Must attend a ½ day seminar/workshop for updates of any changes to specifications and test methods since certification
- The technician must re-demonstrate within one year of the ½ day seminar/workshop to maintain certification

#### **Study Materials**

An Asphalt Concrete Certified Plant Technician Manual is distributed at the beginning of the 5 day course. This manual contains all the information a technician will need to successfully complete his/her certification.

#### **How to Register**

#### **NOTICES**

- Cheating on any level of the exam <u>WILL NOT BE TOLERATED</u> and will result in immediate expulsion from the course and notification to superiors.
  - THE USE OF CELL PHONE CALCULATORS WILL NOT BE PERMITTED DURING EXAM
    - A VALID PHOTO I.D. IS REQUIRED UPON CHECK-IN